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Dr Charles Mackays poem
The Souls of the Children
at the end of 1st Report of Williams
Secular School

& See the other pamphlets by G. Combe
bound in Volume marked Phrenology

Contents.

Lectures on popular education.
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Answer to attack on the Constitution of Man.

All the above by
George Combe.

Williams's Secular School in Edinburgh. – Six Reports.
+ What should Secular Education embrace.

APPENDIX, No. VI.

THE SOULS OF THE CHILDREN.

BY CHARLES MACKAY, LL.D.

"Who bids for the little children—
Body, and soul, and brain?
Who bids for the little children—
Young and without a stain?
Will no one bid," said England,
"For their souls so pure and white,
And fit for all good or evil
The world on their page may write?"

"We bid," said Pest and Famine,
"We bid for life and limb;
Fever, and pain, and squalor,
Their bright young eyes shall dim.
When the children grow too many,
We'll nurse them as our own,
And hide them in secret places
Where none may hear their moan."

"I bid," said Beggary, howling,
"I'll buy them, one and all,
I'll teach them a thousand lessons—
To lie, to skulk, to crawl;
They shall sleep in my lair like maggots,
They shall rot in the fair sunshine;
And if they serve my purpose,
I hope they'll answer thine."

"And I'll bid higher and higher
Said Crime, with wolfish grin,
For I love to lead the children
Through the pleasant paths of sin.
They shall swarm in the streets to pilfer,
They shall plague the broad highway,
Till they grow too old for pity,
And ripe for the law to slay.

"Prison, and hulk, and gallows,
Are many in the land—
'Twere folly not to use them,
So proudly as they stand.
Give *me* the little children,
I'll take them as they're born;
And I'll feed their evil passions
With misery and scorn.

"Give *me* the little children,
Ye good, ye rich, ye wise,
And let the busy world spin round
While ye shut your idle eyes;
And your judges shall have work,
And your lawyers wag the tongue;
And the gaolers and policemen
Shall be fathers to the young.

"I and the Law, for pastime,
Shall struggle day and night;
And the Law shall gain, but I shall win,
And we'll still renew the fight;
And ever and aye we'll wrestle,
Till Law grows sick and sad,
And kill, in its desperation,
The incorrigible bad.

"I, and the Law, and Justice,
Shall thwart each other still;
And hearts shall break to see it,
And innocent blood shall spill;
So leave—oh, leave the children
To Ignorance and Woe—
And I'll come in and teach them
The way that they should go!"

"Oh, shame!" said true Religion,
"Oh, shame, that this should be!
I'll take the little children,
I'll take them all to me,
I'll raise them up with kindness
From the mire in which they're trod;
I'll teach them words of blessing,
I'll lead them up to God."

"You're *not* the true Religion,"
Said Sect, with flashing eyes;
"Nor thou," said another, scowling—
"Thou'rt heresy and lies."
"You shall not have the children,"
Said a third, with shout and yell;
"You're Antichrist and bigot—
You'd train them up for hell."

And England, sorely puzzled
To see such battle strong,
Exclaimed with voice of pity—
"Oh, friends! you do me wrong!
Oh, cease your bitter wrangling,
For till you all agree,
I fear the little children
Will plague both you and me."

But all refused to listen;—
Quoth they—"We bide our time:"
And the bidders seized the children—
Beggary, Filth, and Crime:
And the prisons teemed with victims,
And the gallows rocked on high,
And the thick abomination
Spread reeking to the sky.

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FIFTH ANNUAL REPORT

OF THE

WILLIAMS SECULAR SCHOOL.

"Man is approaching a more complete fulfilment of that great and sacred mission which he has to perform in this world. His reason being created after the image of God, he has to use it to discover the laws by which the Almighty governs his Creation; and, by making these laws his standard of action, to conquer Nature to his use—himself a Divine instrument. Science discovers these laws of power, motion, and transformation; industry applies them to the raw matter which the earth yields us in abundance, but which becomes valuable only by knowledge; art teaches us the immutable laws of beauty and symmetry, and gives to our productions forms in accordance with them."—*Speech of Prince Albert at the Mansion House, March* 21, 1850.

"The Maker of the Universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or neglect of those laws."—*Letter by Lord Palmerston to the Presbytery of Edinburgh, Oct.* 1853.

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FIFTH ANNUAL REPORT

OF

THE WILLIAMS SECULAR SCHOOL,

1 SURGEON SQUARE, EDINBURGH.

This School was opened in December 1848, and was instituted for the purpose of affording to Children of the Working-Classes and others a practically useful Education.

The ordinary branches of Reading, Writing, Arithmetic, English Grammar, and Geography, are taught; in addition to which, there is a systematic course of Elementary Instruction, communicating to the pupils a knowledge of the world as they will actually find it when they leave School, of the general duties they will have to perform, and of the conditions upon which success and happiness in this world depend:—and besides being thus *taught*, the Pupils are *trained*, by moral influences, to act intelligently, energetically, dutifully, and kindly—to *practise*, as children, those virtues which they have learned will be necessary to render them, as men and women, intelligent, moral, useful, and prosperous members of society.

They are taught that the possession of intelligence, and the practice of morality, are necessary to place man in harmony with the laws of his own constitution and with those of the external world; and that thus the obligation to acquire knowledge and to act virtuously is Divinely imposed, and is enforced by the moral and religious sentiments, as well as by motives of prudence.

The word "Secular" is sometimes used as expressing the opposite of "Religious;" and thus some have supposed that the "Secular School" means the "Anti-religious School." The Promoters beg to explain that they do not use the term in any such sense. The "Secular School" signifies the School in which knowledge of things and duties belonging to *this world* is imparted, and moral habits are formed. As these things and duties are of Divine origin and institution, this knowledge cannot be irreligious. Respecting them, the great majority of mankind are practically agreed, and they can therefore be taught together in the same school without offence to prevalent convictions; but doctrinal religion cannot thus be taught in a school open to all sects, without giving offence to some. The Promoters and friends of the Secular School by no means advocate the *exclusion* of this last-mentioned *portion* of religious education, but simply desire that it should be taught *separately*, either by the parents, or in schools instituted for the purpose, under the superintendence of the clergy of each denomination.

By this means, they believe, both branches of education will be far more efficiently conducted. In this School, therefore, only the secular *department* of education is undertaken; to be supplemented, according to the wishes and opportunities of the parents, by home lessons, Sunday-school teaching, or such other means as may be organized for the purpose of superadding special doctrinal instruction. In this respect the Secular School is in the same position as the High School and University of Edinburgh, and most of the public seminaries for the upper classes, both in this city and throughout the United Kingdom, which are really Secular Schools, though the word secular is not formally used in their titles.

The Subjects of Instruction include—

English Reading.
Grammar.
Composition.
Writing.
Arithmetic.
Geography.
History.
Book-Keeping.
Drawing.
Vocal Music.

Plain and Ornamental Needlework for the Girls.

Also the Elements of

Algebra.
Geometry.
Natural History.
Chemistry.
Natural Philosophy.
Social Economy.
Physiology.
Phrenology.

The above-named branches of science are presented to the children as expositions and illustrations of the phenomena and forces of nature, which surround and are acting upon us, at every moment of our existence, and which become useless, beneficial, or injurious to us according as our ignorance or knowledge of their properties leads us to neglect, misuse, or intelligently apply them.

Besides the above-named subjects, lessons are given on several others of a miscellaneous nature, such as the materials and processes employed in the arts and manufactures, the characteristics and beauties of the different styles of Architecture, of Sculpture, Painting, Poetry, Natural Scenery, &c.

These subjects are taught, not as mere accomplishments acquired for the sake of becoming learned, and talking pedantically, but of reference to their useful applications to the practical concerns in everyday life.

The teaching of the philosophy of "common things," which has recently been advocated so ably by Lord Ashburton, has thus been a leading object in this School from its commencement. Lord Ashburton says that teachers should shew "how the garden could best be cultivated, how the dwelling might be most efficiently and economically warmed and ventilated, upon what principles food and clothing should be selected, how chronic ailments might be averted by timely attention to premonitory symptoms and recourse to the physician. They could teach the measurement of work, the use of the lever, the pulley, and the windlass. They could, in short, expound those methods, suggested by ever-advancing science, by which toil might be lightened and subsistence economized. All this was capable of being taught, and well taught. Why was one mother of a family a better economist than another? Why could one live in abundance where another starved? Why, in similar dwellings, were the children of one parent healthy, of another puny and ailing? Why could this labourer do with ease a task which would kill his fellow? It was not luck nor chance that decided these differences; it was the patient observation of nature that suggested to some gifted minds rules for their guidance which had escaped the heedlessness of others. Why should not these rules, systematized by science, and illustrated by their didactic powers, not be imparted to the pupils of their schools, to enable youth to start at once with the experience of age; or, if this were not in all cases possible, why should not all be taught betimes to read those lessons in the Book of Nature, from which some had derived such unquestionable advantage? Remember, that it was by daily use of the powers of nature that man fed, and clothed, and housed himself. He employed fire in a hundred ways, for a hundred purposes; why should he not be taught the doctrine of heat? For some purposes he might learn to use it better, and he might learn to use it for more. Again, he passed the live-long day in the application of the mechanical powers; why should he not be instructed in them also? It was true, that princes in this land were ignorant of them as well as peasants. In this progressive country we neglected all that knowledge in which there was progress, to devote ourselves only to those branches in which we were scarcely, if at all, superior to our ancestors. In this practical country, the knowledge of all that gives power over nature was left to be picked up by chance in a man's way through life. In this religious country, the knowledge of God's works formed no part of the education of the people—no part even of the education of a gentleman."*

This School was established chiefly for the purpose of supplying these deficiencies (see 1st, 2d, 3d, and 4th Annual Reports of Williams' Secular School, published in the years 1850, 1851, 1852, and 1853, by Maclachlan and Stewart, Edinburgh, and Simpkin and Marshall, London).

In the organization of the School, the teacher has endeavoured, as far as possible, to combine the advantages of the monitorial and simultaneous systems, without carrying either of them so far as is customary with their exclusive partisans.

The monitorial arrangements are similar to those recommended by the British and Foreign School Society—the number of children in each class under a monitor averaging 9 or 10, and never exceeding 12. In this way the number under each monitor is kept so low as to be within his power of control, and the pupils can be so classified, in relation to their attainments, that what is intelligible to one is intelligible to all. By the classification which is thus practicable, the chief difficulty of simultaneously teaching large numbers is obviated—

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* Speech of Lord Ashburton at the Examination of the Wolvesey Training School, December 16, 1853.

viz., that arising from some pupils being in advance of the rest, and answering every question, while the others are passive, or only mechanically repeat the answers of the more intelligent; or, on the other hand, from the more advanced losing time, and acquiring habits of inattention and idleness, while what they understand clearly is being made intelligible to the rest.

Reading is taught partly in the monitorial classes, and partly in large classes by the teacher, assistant, and pupil-teachers. In the monitorial classes the books used are very simple, and generally of a narrative and descriptive kind, such as the children can easily comprehend, and cannot fail to be interested in. Each child in turn reads aloud, the whole class following mentally, and correcting, if they can, when an error is made. When the class cannot correct an error, the monitor does so; or if a difficulty occurs beyond the powers of the monitor, he appeals to the teacher. After about twenty minutes reading, the monitor questions his class on the subject of the lesson, and on the spelling and signification of the words that have occurred in it. During this exercise, the teacher is moving from class to class, supervising the labour of the monitors, explaining any difficulties that may occur in the lessons, and giving any other assistance that he may perceive to be needed.

In the collective lessons for simultaneous instruction of large numbers, the reading is made subservient to the systematic courses of instruction on the Moral and Physical Sciences, Natural History, Geography, &c. In these lessons elocution and English pronunciation are carefully attended to, and every effort is made to enable the children to grasp fully the subject of the lesson, by supplying them with additional facts and illustrations of a familiar, and, if possible, local character; and by leading them to supply illustrations of their own, and practical applications of the knowledge they are acquiring. Spelling and etymology are connected incidentally with these lessons. Wherever the subject permits, and the means of the School will afford, objects and diagrams are exhibited; and the teacher has found that the rapidity, accuracy, and stability of the progress of the pupils in any branch of knowledge, may be almost measured by the number of such illustrations that has been presented to them.

With the exception of the arithmetical tables, no lessons are set to the children to learn by rote.* Wherever inferences or theories are involved, they are submitted to severe examination—the teacher suggesting difficulties and apparent objections, and requiring the pupils to do the same. In general, his object is to lead rather than carry them through a subject, by supplying, or, if possible, drawing from themselves, such suggestions and facts as may direct their minds to investigate and find their own conclusions, rather than to remain mere passive and submissive recipients of the statements of the teacher.

* On this account the children in general have no tasks to learn at home, and as they are always kept fully and actively occupied during school hours such tasks are not found necessary. The elder children have generally to write exercises, and there is a circulating library from which they may borrow books for recreation or voluntary study.

By these means the intellectual faculties are vigorously exercised and developed, and the subjects taught are firmly fixed in the mind. It is hoped that the intellectual training thus commenced in the School will not terminate there, but that the children will acquire habits of investigation, and an independence and energy of intellect, which will induce them to continue through life the pursuit of knowledge as their most valued recreation. Object-lessons are given daily to the younger children by the assistant, and pupil-teachers. These lessons are conducted so as to afford some general and rudimentary ideas on various branches of knowledge, and on the meaning and application of the ordinary words and scientific terms which the sensible properties of the objects illustrate, in order to prepare the children for those systematic courses of instruction in the sciences which constitute the chief business of the advanced classes.

By presenting to the youngest children a piece of metal, of rock, of glass, of wood, &c., and examining experimentally its most obvious properties,—such as its colour, texture, hardness, cohesion, odour, specific gravity, fusibility, &c., and naming them by their proper scientific designations—which thus taught are more easily understood and remembered than less definite and accurate terms,—the pupils are prepared for the advanced classes, where the higher phenomena of nature, and the mechanical and chemical laws which regulate them, are studied.

In Geography all that is visible on the map,—the distribution of land and water, and of mountains, valleys and plains, the courses of rivers, and the relative situations of the various countries and their chief cities; also the climate, plants, animals, and the most prominent customs and physical peculiarities of the people of different nations,—may be presented to the minds of children of from five or six to ten years of age, and rendered intensely interesting to them; and whatever interests a child is understood and remembered. When they have passed through this preliminary training, they are ready for the advanced classes, in which they are instructed in the relations of our planet to the heavenly bodies, and the forces which determine its movements among them; the structure of the earth's crust, and the changes it has passed through, and is undergoing; the constitution of the atmosphere and of the waters of the earth, their mutual relations and their influences on the solid foundations upon which they rest; the phenomena and laws of climate and meteorology; and the moral and intellectual characteristics, social and political institutions, and general history of the inhabitants of different countries.

The object-lessons are also made introductory to Physiological and Moral Science. A bone, a skull, the whole skeleton, an anatomical diagram or preparation, is sometimes made the subject of an object-lesson to the younger children; and thus they become acquainted with the general structure, and some of the functions, of their own bodies, preparatory to entering upon a regular course of Physiology.

Rudimentary ideas of their own mental faculties are afforded, by leading them to inquire how they know that an object is brown, or hard, or odorous, &c.; and thus the organs and functions of the senses and perceptive faculties are made to a certain extent familiar to them, and the subject of mental philosophy and the relations of their faculties to the external world is opened, to be afterwards more fully unfolded in the advanced classes for Phrenology.

The comparison of a natural with an artificial object—a piece of flint, for example, with a piece of glass, or a tree with a table—serves as the basis of elementary instruction on the distinctions between raw materials and manufactured articles, on wealth and its production by labour, on the capital required for its production, on wages, profits, division of labour, interchange, commerce, &c.

Having, in this manner, conveyed to the minds of the children some simple, precise, and accurate notions of the forms and qualities of physical objects, the next aim of the Promoters and Teachers of the School is, to superadd a systematic elementary knowledge of the structure and functions of the human body, and of the faculties of the mind. For this purpose Physiology is taught, and is illustrated by a human skeleton, by casts of the muscular system, and by diagrams representing the bloodvessels, the digestive and respiratory organs, the brain, spinal cord, and nerves, all of which are used as the basis of explanations of the structure, modes of action, and uses and abuses of the bodily and mental organs, and of the laws of health. Abstract terms and disquisitions are as much as possible avoided, and objects, facts, relations, and mental states, falling within the observation and consciousness of children, and elucidated by numerous and familiar illustrations, are chiefly relied on.

Thus grounded in accurate ideas concerning the simpler elements and laws of the physical and moral worlds, the pupils are prepared for lessons on Social Economy, in which the natural laws which govern the production of wealth, and the manner in which it has been and may be distributed, are taught; and attention is directed to the origin of differences of rank, to the foundations in human nature of civil laws and government, and the general duties and arrangements of social life.

The success of the instruction in these departments exceeds the most sanguine expectations of the Promoters of the School, and shews that God who ordained the human faculties, adapted the remainder of creation to them, with a wisdom and goodness which promise results of unspeakable importance, whenever adequate instruction in natural truth shall be generally and successfully conveyed to the opening faculties of the young.

Among other means which have been adopted for awakening the intelligence of the children, one may be mentioned, which was tried by the teacher as an experiment, and has proved successful. The children were directed to look about them wherever they went, to examine carefully the things and books they met with, and to try to find something they could not understand, and which might puzzle the teacher; to write a question concerning it, with their name appended to it, and hand it to the teacher, who, if he could, would answer it, and explain the subject to the whole class. This was tried shortly after the School opened; but it was not until the month of May following, that any of the children were induced to commence. When once begun, however, the questions became subjects of much excitement, and poured in very abundantly. Lessons have since been regularly given upon them, and they are found to interest the children more than anything else, and to afford a powerful means of exercising their observing and reflective faculties, besides suggesting to the teacher a multitude of simple useful subjects, and common applications of great principles, about which the children's minds are already active, and their curiosity roused; and informing him of much that it is desirable he should know concerning their ideas and wishes, the subjects which most occupy their minds, and those which fail to do so.

It must not, however, be inferred, that in thus presenting these subjects in relation to their practical applications, the inherent interest of knowledge for its own sake is lost sight of. It is found that little effort is required, in the form of rhetorical commentary, to lead children to appreciate the admirable properties and beautiful harmonies of nature; for if their attention is fairly directed to the facts and relations of Science and Natural History, and these are made clear and intelligible to them, they appeal spontaneously not only to the intellect, but to the easily roused wonder and poetic emotions of the child, and quite as effectually as the most popular nursery fictions. The Steam-engine moved by a natural force which the intellect of man has summoned to his use, is stronger than the biggest giant that fabled heroes ever vanquished. The modern Chemist, by availing himself of the simple properties of the earth's materials, can effect changes as wonderful as those which the magician, aided by his spells and familiar spirits, is said to have produced. The genii conjured up by means of Aladdin's lamp could not perform half the marvels actually achieved by electricity; which in one of its forms can be made to appear by rubbing a piece of common glass. Even fairy land, the purest and most elegant of all the creations of imaginative poetry, is eclipsed by the miniature world of beautiful beings the Microscope unveils; and it would be profanity to compare even the grandest of romantic conceptions with the overwhelming vastness of the infinite maze of worlds revealed to us by the Telescope.

The importance of educating the poetic faculties of children by directing them to natural objects has been too much overlooked. The emotional desires for novelty, grandeur, beauty, and perfection, are among the most active of the child's faculties. Fiction, frequently romantic and exaggerated, is the medium through which the objects of these aspirations are most commonly presented to the child; and when we *commence* by such means to educate the faculties on which they depend, the faculties are misdirected, and acquire a love of wild romance and florid exaggeration, in preference to reality and simple truth. They are thus associated in their action with the propensities, rather than with the reflective faculties and moral sentiments. If the child is taught to perceive, to love, and admire the beauties and grandeur of the qualities, phenomena, and laws of nature, its taste will be elevated, and a power of appreciating the delicate and exquisite poetry embodied in nature's simple truth will be evoked; and thus its aspirations to novelty, beauty, grandeur, and perfection will be enlisted as powerful stimulants to intellectual and moral improvement. This may be done without altogether excluding fiction, by making truth or nature the primary, and fiction or art the secondary, means of cultivating these emotions—the latter being admitted only as ideal or eclectic representatives of the former.

The importance of cultivating Ideality has been referred to in previous reports; its influence on the domestic habits is very great. While a knowledge of the laws of health will show the consequences of inattention to cleanliness, this faculty, by adding an impulsive or emotional love of elegance, purity, and refinement, and an instinctive abhorrence of dirt, coarseness, and squalor, will aid the intellectual faculties in enforcing practical obedience to their requirements.

The efforts which have recently been made to improve the sanitary condition of our cities, have strikingly demonstrated the necessity of a knowledge of the functions of the human body, and of the laws of health among all classes. Evidence has been carefully collected, fully demonstrating that a frightful amount of lingering pain and premature death are caused by inattention to easily observed sanitary precautions; and yet how small—compared with the magnitude of the evil—are the efforts made to arrest the destruction. If we were to fight a battle of Waterloo once a week, our losses in killed and wounded would not exceed the actual number slain and stricken by the enemy that we blindly or negligently cherish within our homes, and allow to remain comparatively unmolested in our streets. Although the magnitude of the evil has been so clearly demonstrated, and, in a general way, popularly acknowledged, our legislators and magistrates hesitate to carry out efficient permanent remedies, from the conviction that public feeling would not sanction the requisite expenditure. How does this happen? War taxes are assented to with alacrity, but health taxes are grudged. One important reason appears to be this,—The public are sufficiently informed upon military subjects to understand how ships, artillery, sailors and soldiers, conduce to bring about the end required; they see their money doing its work, and can follow it through all its operations. They can understand how cannon balls knock down the enemy's fortifications, and bullets destroy his armies; and that powder, shot, and men cost money, which, therefore, cannot be dispensed with. The necessity of the expenditure, if war is undertaken, is evident, and the rationale of its efficiency is clear. Not so with sanitary improvements. The people may assent to statistics which they cannot contradict, and have a kind of belief in the possibility that the means proposed may produce the effects anticipated by sanitary reformers; but there is a want of intelligent conviction, owing to a want of power to perceive *how* the expenditure is to bring about the results for which the money is paid. A sanitary expenditure is thus a sort of secret service money, paid for expelling the enemies to health by occult means; and if, in like manner, a war tax for unintelligible purposes were asked, it is doubtful whether any amount of confidence in the judgment of the government would be sufficient to induce the people to consent to it.

If physiology were generally taught, as it is in this school, and all had some acquaintance with the exquisitely delicate and beautiful mechanism of their own bodies, and were trained from childhood to regard this mechanism as a gift intrusted to their charge by its Creator, and its preservation imposed upon them as a religious duty, they would consider no practicable outlay that would aid them in securing health as a sacrifice.

A general knowledge of physiology would make them acquainted with the changes which are perpetually going on in every tissue of the body, and the tender affinities by which organic substances are held together. They would understand how slight are the chemical forces that suffice to break these ties; and the fact, that life, health, and happiness depend mainly upon the purity of the perpetually renewed constituents of the frame would become apparent. This would render it rationally intelligible, how impurities in the air we breath, the food we eat, or the water we drink, tend, by their chemical powers, to derange the delicate balance of the affinities which determine the normal composition of the blood, and the distribution to every part of our complex organism of its appropriate atom, and how every disturbance of this kind must of necessity be attended with serious mischief; for upon the proper constitution of the blood, and the due distribution of the atoms, health entirely depends. With a knowledge of these facts and principles, the expenditure for the establishment and maintenance of sanitary regulations would no longer be a secret service money, but an outlay, the necessity of which would be deeply felt, its mode of efficiency practically understood; and then, instead of being resisted, it would be loudly called for. With a knowledge of the functions of the nervous system, the dependence of general activity and cheerfulness, of physical, intellectual, and moral vigour, on the supply of pure healthy blood to the brain would be understood, and all possessing such knowledge would be convinced that sanitary expenditure is not only no sacrifice, but on the contrary the most profitable of all investments, yielding to the community a rich return in the increased productive power of every member, and with this increased power of producing wealth additional capacity for enjoying it. It is also evident that no general effort for sanitary improvement, even aided by the most abundant pecuniary means, can be effectual, until the habits of individuals of all classes are brought into accordance with the laws of health. House to house visitation, during the prevalence of a pestilence, useful and necessary as it is at present, is but a clumsy and comparatively inefficient mode of attempting to enforce, for the moment, an approximation to that habitual conduct, which early teaching of the laws of health, and training to their observance, might efficiently and permanently establish.

The physical resources of a nation are the results of the action of the brains and muscles of its people, and must be proportionate to the health of these organs, and the intelligence and energy with which they act. The virtue, happiness, and general prosperity of a community depend upon the harmonious and well directed action of the faculties of the individuals composing it; and this harmony cannot exist without the possession of healthy and well balanced brains. To exaggerate the importance of teaching to every man, woman, and child, the structure of his own organism and the laws of its action is therefore impossible.

The value of the course of physiological teaching becomes greatly increased, when it includes the physiology of the brain, as is the case in this school. The children are shewn that the conditions of mental vigour are as certain and invariable as those of physical health. Thus when the heart, lungs, stomach, liver, &c., all act harmoniously together, each doing its share in the work of the system, by performing efficiently the function assigned to it, the body is in health; but when any organ is deranged, weakened, or inflamed, and performs its function irregularly, deficiently, or in excess, feebleness or disease is the result. So with the brain; the children learn that every part of it is adapted to its particular objects, as directly and perfectly as the stomach is to food, the lungs to air, the muscles to gravitation and other physical resistances; that moral and intellectual education is the presenting to the faculties manifested by the cerebral organs their proper objects, and training them to act with vigour and in harmony in relation to them; that intellectual power, moral virtue and general happiness, result from the proper direction and harmonious action of the faculties, and that imbecility, vice, and misery are the result of the opposite states. In studying the structure of the skeleton, they see simple and unmistakeable evidences of adaptation and design. As they proceed onwards to study the organs and functions of digestion, respiration, &c., they learn how beautifully and wisely all these are adapted to the mechanical and chemical properties of the substances to which they are related, and upon which they act. In like manner with the brain; although the intimate nature of its action is too subtle and refined for our comprehension—although the nature of mind itself is profoundly mysterious—yet the dependence in this life of its faculties upon their appropriate organs can be demonstrated, and the sphere of action and objects related to each described; and when this is done, the same wise and beneficent adaptation, rendered still more admirable from the greater elevation of its objects, is apparent. The fact, that it is impossible to infringe any moral law without inducing suffering, is thus placed upon a scientific basis; such infringement is seen to be a misuse of our faculties, by directing them to improper objects or exercising them with undue intensity; and to be analogous to misusing the stomach by supplying it with improper food, or overloading it. When the functions of the cerebral organs and their relations to each other and the external world are thus understood, the sin and folly of the former abuses are as evident, and their evil consequences are seen to be as inevitable, as the latter.

Some persons appear to have a sort of objection to this view, on the ground that it degrades morality by bringing it down to a physical basis. This is an error arising from taking a very superficial view of the subject; for when further examined and properly understood, its tendency is quite the reverse. The brain, a physical object, is an instrument constructed by the Divine Architect for specific purposes. We can shew that it is composed of several parts, each having its specific function; therefore, all of these functions are operations which the Deity has designed that man shall perform. There are organs whose actions give rise to the desire and the capacity to observe and study the objects, phenomena, and forces of the external world, and our own consciousness. The existence of these organs supplies the simplest and clearest evidence that it is the Divine Will that man shall seek knowledge of the objects related to them; and, therefore, that ignorance is sin; and the privations and misery accompanying ignorance, are punishments following the neglect of this duty. We can place our finger on the organ of Benevolence, and read in its function the Divine command, "Love one another." If the question be raised, whether religion is a natural institution, or merely the invention of priests, we have the organs of Veneration, Marvellousness, Ideality, and Hope, to answer it. If the doctrine that "property is theft" be put forward, we have at once presented to us by the organ of Acquisitiveness, evidence that the Creator destined man, as he has destined the beaver, the ant, the bee, &c., to lay up a store and guard it for his use. From the earliest dawning of philosophy it has been continually a subject of debate, with nearly equal championship on either side, whether the sentiment of justice is an artificial creation, merely suggested and supported by the existence of civil laws, which men were compelled to make as soon as they formed themselves into communities, or whether it arises from a natural emotion, anterior to all legal and artificial arrangements. The physiology of the brain enables us to settle this question also. Certain convolutions are found to be developed in proportion to the strength of the manifestation of the sense of justice in individuals, and these are original elements of the human organism, created with man's creation. The function assigned to them, therefore, shews as clearly that to act justly is a Divine command, as though the mandate were thundered from heaven at every rising of the sun. In like manner, by studying the sphere of action of the other faculties, we learn what man is capacitated to do on this earth, and not only that, but how he may fulfil his duty; for the brain in its action observes fixed, ascertainable, physiological laws. Every organ has its legitimate sphere of action in which it may and should operate without interfering with the action of the rest. This sphere is ascertainable, and may be described with tolerable accuracy, even with our present limited knowledge of the subject. The cerebral organs, like the other organs of the body, may be strengthened by due exercise; each organ may be called into action by presenting it with its appropriate objects; what these objects are may be ascertained, and education thus ceases to be empirical. The mental philosophy evolved by the physiology of the brain is so simple and practical, that there is little difficulty in bringing it within the reach of the child's intellect; and thus the pupil can intelligently co-operate in his own education, and follow it out after leaving School.

This statement is made as the result of five years' experience, and its truth is open to the test of public observation.

The lessons on Social Economy are connected with those on Physical, Physiological, and Moral Science; and particular care is taken to shew to what extent social relations are dependent on fixed natural laws, and the necessity of adapting all artificial arrangements to these laws. The relations between capitalist and labourer, the laws of the fluctuations of the rate of wages, profits, interest, &c., especially the influence of abundant and deficient harvests on these; the effects of variations in the currency upon the prices of commodities and money wages; and the difference between these and real value and real wages, when reduced to their simple elements, are easily understood by children, although sometimes regarded as complicated and difficult problems by adults. Indeed, the Teacher has found it much easier to make these subjects clear to children than to parents; and this seems to arise from the fact, that terms such as price, value, capital, &c., are employed in common speech in such a vague, ambiguous, contradictory manner, that they represent to the mind of adults who are in the habit of familiarly using them, a confusion of ill-defined, contradictory ideas; and all the reasoning based upon them of course partakes of the same character. With children the case is different; the terms made use of are almost new to them, and they may be easily taught to attach to the words a definite and unvarying signification, and then the apparent complexity and difficulty of the subject are avoided. Besides, their minds are not prepossessed with the popular errors and prejudices which are so commonly entertained by persons in middle life on these subjects. The ruinous struggles which have recently taken place between capitalists and labourers have shewn how serious may be the consequences of popular ignorance of the well-established simple elements of Political Economy. These contests have demonstrated that the ignorance is by no means limited to the workmen, but that the employers as well as the labourers are sadly in need of instruction on these subjects. If both were systematically instructed, and could discuss questions that might arise between them upon fixed principles, the workmen could, if their demands were just and reasonable, shew them to be so by a simple statement of facts that could not be refuted; or if they made unjust demands that could not be complied with, or were incompatible with the permanent interests of both, the employers could easily make this apparent. On the other hand, when it might become necessary to work short time, or to lower wages, or to choose between these, intelligent employers of intelligent workmen might explain the circumstances which led to the necessity; and when it was rendered evident, there can be no doubt that the workmen would patiently submit to it in the meantime, and both workmen and employers would co-operate in adopting such means as would reduce the inevitable suffering to a minimum, improve the condition of the trade, and bring about a more prosperous state of things for the benefit of both and the whole community, instead of contending stubbornly in efforts tending to mutual ruin.

It has been stated in the previous Report, that no corporal punishments are adopted in the School. Every year's experience strengthens the convictions of the Promoters and Teachers, of the advantages of this rule both to Pupils and Teachers. Obedience is more easily obtained without than with corporal punishments, and the whole moral tone of the School is greatly elevated. The basis of the discipline of the School is a spontaneous preference on the part of the pupils of knowledge to ignorance, of activity to idleness, and of virtue to vice, founded on the moral and intellectual convictions and experience communicated to them in the School of the superiority of the former; and as this is a foreshadowing of the discipline of after-school life, it is hoped that the habits of order, industry, and obedience will remain permanent to a greater extent than could be expected if these rested on no higher motives than fear of the rod; which ceases to operate after the child leaves School.

The system of teaching followed in this School is framed to exercise the whole mental faculties upon their natural objects, and to communicate not only a knowledge of things and beings and their relations, but to elicit an extent of capacity for observing, reflecting, and right feeling, which is highly conducive to success in life. The ordinary system of teaching by lodging words and ideas in the *memory* only, fails in producing these effects, and leaves the individual under the necessity of commencing his practical education, empirically, unsystematically, and often erroneously, by practical experience, after he has left school. He finds the way to success and virtue, rather by failures and exhausting errors, than by following the direct course which leads to them.

The boys and girls are educated and trained together, both sitting on the same benches and receiving the same instruction, with the exception of knitting and needle-work which are taught separately to the girls. No evils, but much good, in improving the boys in refinement, and the girls in self-reliance and feminine reserve, have attended this practice.

W. M. WILLIAMS, *Teacher.*
ELIZA LAWRIE, *Female Teacher.*

On the 2d of September 1853, Mr James Simpson, one of the original Promoters of the School, died suddenly, to the great regret of all who could appreciate his enlightened views and untiring zeal in relation to the education of the people. The other original Promoter having, through infirm health and advancing years, become unable to continue the active superintendence of the School, which he exercised for several years after its institution, Major Arthur Mair, Dr James Coxe, and Mr John Oliver, merchant, have kindly agreed to act with him as promoters, and they join in this Report. They have only to add, that the School has continued to enjoy the support of the working classes of Edinburgh, who have furnished to it the previous average number of 150 pupils, and also of the subscribers who have liberally supplied the funds necessary for its maintenance. The before named Teachers and also the Pupil Teachers, William Mason, Elizabeth Watson, and Margaret Maclellan, have given ample satisfaction in the discharge of their duties, and made commendable progress in their own studies. Several volunteer Teachers, male and female, have solicited and obtained permission to attend the lessons and assist in the business of the School, and the Promoters have had several applications from England for Teachers trained in it, which they have been unable to supply ; facts which shew an increasing appreciation of its merits.

GEORGE COMBE, 45 Melville Street,
MAJOR ARTHUR MAIR, 29 Abercromby Place,
JAMES COXE, M.D., 9 Atholl Crescent,
JOHN S. OLIVER, Merchant, 329 High Street,
Promoters.

APPENDIX.

ABSTRACT OF ACCOUNTS OF THE WILLIAMS SECULAR SCHOOL.

(*For the Year* 1853.)

RECEIPTS, DONATIONS, AND SUBSCRIPTIONS.

Balance from 1852,	£8	17	0
The Trustees of W. R. Henderson, Esq.,	50	0	0
William Ellis, Esq., Champion Hill, Camberwell,	15	0	0
Charles Butler, Esq., London,	10	0	0
Paul Butler, Esq., London,	10	0	0
Samuel Smith, Esq., Combe Hurst, Kingston-on-Thames,	10	0	0
The Right Hon. the Lady Hartland, Hampton Court,	5	0	0
Do. Do. for Treat for Children,	3	0	0
Mrs Fanny Kemble, 99 Eaton Place, London,	5	0	0
Thomas Horlock Bastard, Esq., Charlton, Dorsetshire,	5	0	0
George Combe, Esq., 45 Melville Street,	5	0	0
John Oliver, Esq., High Street,	5	0	0
Hewett Cotterell Watson, Esq., Thames Ditton,	5	0	0
George H. Girle, Esq., 5 St John Street,	2	2	0
Major Mair, 29 Abercromby Place,	2	2	0
H. O. Robinson, Esq., Ripon Lodge, Reading,	2	2	0
Arthur Trevelyan, Esq., Tyneholm, Tranent,	2	0	0
Miss Carnegie, Laverock Bank,	2	0	0
Miss Douglas, Ainslie Place,	2	0	0
Miss Caroline Ann Griffiths, Hastings,	2	0	0
Mrs Cox, Gorgie Mills,	1	1	0
Right Hon. D. Maclaren, Lord Provost, Newington House,	1	1	0
Robert Ainslie, Esq., W.S., 39 Great King Street,	1	1	0
Dr James Coxe, 9 Atholl Crescent,	1	1	0
Robert Cox, Esq., W.S., 25 Rutland Street,	1	1	0
Francis Farquharson, Esq. of Finzean,	1	1	0
Messrs J. & J. Gray, Melbourne Place,	1	1	0
William Ivory, Esq., W.S., St Roque Cottage, near Edinburgh,	1	1	0
Charles Maclaren, Esq., Moreland Cottage, near Edinburgh,	1	1	0
Thomas Knox, Esq., 15 Hanover Street,	1	1	0
D. Low, Esq., 6 South Bridge,	1	1	0
Mrs Richard Carmichael, Dublin,	1	0	0
Misses M. & B. Combe, 7 Morrison Street,	1	0	0
Miss Stirling Graham of Duntrune,	1	0	0
Mrs Leith Lumsden, Meggetland House, near Edinburgh,	1	0	0
Miss Murray, 46 Moray Place, for Excursion for Children,	1	0	0
The Honourable Lord Murray, 11 Great Stuart Street,	1	0	0
Charles Jenner, Esq., Princes Street,	1	0	0
Carry forward,	£169	14	0

Brought forward,	£169	14	0
W. Renton, Esq., 14 Princes Street,	1	0	0
Mrs George Cox, Alva Street,	0	10	0
Craig Brothers, South Bridge,	0	10	0
Thomas Cooper, Esq., 2 South Bridge,	0	10	0
John Gray, Esq., 11 Hanover Street,	0	10	0
R. R. Noel, Esq., Dresden,	0	10	0
Robert Shiels, Esq., 5 Bristo Place,	0	10	0
Miss Chinery, 4 Clarence Parade, Cheltenham,	0	5	0
Mrs Rae, 7 Charlotte Street,	0	5	0
Mrs Jane Wigham, Gray Street, Newington,	0	5	0
John Anderson, Esq., 4½ North Bridge,	0	5	0
Henry Bowie, Esq., 4 Queen Street,	0	5	0
J. R. Findlay, Esq., George Square,	0	5	0
John Fergusson, Esq., 61 Clerk Street,	0	5	0
J. D. Grant jun., Esq., 18 South Bridge,	0	5	0
John Russell, Esq., 18 Leith Street,	0	5	0
T. Spedden, Esq., Kirkcaldy,	0	5	0
School Fees,	115	1	6
Subscription of children to Circulating Library at 1d. per month,	1	8	10½
Sale of Books and Reports,	0	7	3
For use of Coals and Gas,	1	16	0
From Children for Excursion and Pantomime,	3	11	6
TOTAL RECEIPTS,	£298	9	1½

EXPENDITURE.

Salaries, and Proportions of Fees to Male and Female Teachers, Pupil Teachers, and Monitors,	£173	18	6½			
Rent and Taxes for School-house, No. 1 Surgeon Square, and Hall for Examination,	19	0	2½			
Fires, Gas, and Cleaning School,	21	5	1			
School Fittings, Furniture, and Repairs,	6	16	0			
School Books and Stationery,	25	3	5			
Apparatus, &c.,	13	16	0			
Printing Reports, Prospectuses and Circulars, Advertising, Postages, &c.,	28	1	4½			
Excursion of Children to Habbie's Howe, visit to Pantomime, Refreshments at Examination, &c.,	11	15	1½			
(Of this amount £3 was supplied by Donation from Lady Hartland, £1 from Miss Murray; the payments by the Children amounted to £3, 11s. 6d.; and the remaining £4, 3s. 7½d., came from the General School Fund.)						
Sundries,	0	4	0			
TOTAL EXPENDITURE,				299	19	9
Balance against School,				£1	10	7½

Edinburgh, 11*th May* 1854.—I have examined the detailed accounts, of which the foregoing is an abstract, and compared them with the vouchers, and hereby certify that they are correctly stated, and sufficiently vouched.

WM. FRASER,
1 ALBYN PLACE.

Thomas Horlock Bastard
Esq

The above in George Combe's
Writing J M S

SIXTH ANNUAL REPORT

OF

THE WILLIAMS SECULAR SCHOOL,

1 SURGEON SQUARE, EDINBURGH.

THE Fifth Annual Report of the School embraced an account of its teaching and discipline, and a statement of the Accounts for the year 1853.

The School continued to be taught on the principles therein described, with unabated success, till the end of the Session 1854. The annual public examination then took place, and gave high satisfaction to the Parents of the Children and a large number of visitors.

Previous to that time, however, Mr Williams had been invited to accept of the office of Head Master of the "Birmingham and Midland Institute," an Institution which afforded him a wider sphere of public usefulness, and larger emoluments than the School in Edinburgh could afford; and the Promoters, who were consulted before the offer was made to him, having all along been conscious that they had not the means of adequately rewarding his great talents and attainments and his unwearied application, considered it an act of justice equally to the community and to himself to consent to his embracing the offer, and advancing into this higher sphere. He accordingly received the appointment. The Promoters advertised for a Successor to him as Teacher of the Edinburgh School, and applied by correspondence to the friends of advanced education in London and Glasgow, but no qualified Teacher could be found.

In consequence the School was not opened after the Vacation, and still continues closed. The funds were chargeable with rent, taxes, cleaning, &c., till the 15th of May 1855, but all other expenses ceased